



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                        | FILING DATE                                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--|---|----------------------|-------------------------|------------------|--|
| 09/939,580                             | 08/28/2001  | Gal Ben-David        | P-4365-US               | 3233             |  |
| 27130                                  | 27130 7590 04/14/2004                             |                      |                         | EXAMINER         |  |
| EITAN, PEARL, LATZER & COHEN ZEDEK LLP |   |                      | LEE, MICHAEL            |                  |  |
|  | ROCKEFELLER PLAZA, SUITE 1001<br>W YORK, NY 10020 |                      | ART UNIT                | PAPER NUMBER     |  |
| ,                                      |   |                      | 2614                    | 10               |  |
|  |   |                      | DATE MAILED: 04/14/2004 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)   |  |  |  |  |
|--|--|--|--|--|--|--|
| , Office A 41 as Comments  | 09/939,580   | BEN-DAVID ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit   |  |  |  |  |
|  | M. Lee   | 2614   |  |  |  |  |
| The MAILING DATE of this communication app Period for Reply  | ears on the cover sheet with the c   | correspondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 02 M  | ay 2002.   |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This   | ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.  |  |  |  |  |  |
| 3)☐ Since this application is in condition for allowar   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |  |  |
| Disposition of Claims  |  |  |  |  |  |  |
| 4) Claim(s) <u>1-37</u> is/are pending in the application.   |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw  | vn from consideration.   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-21, 25-37</u> is/are rejected.   |  |  |  |  |  |  |
| 7)⊠ Claim(s) <u>22-24</u> is/are objected to.  |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.  |  |  |  |  |  |
| Application Papers   |  |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.   |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |  |  |  |  |
| <ul><li>12) Acknowledgment is made of a claim for foreign</li><li>a) All b) Some * c) None of:</li></ul>   | priority under 35 U.S.C. § 119(a   | )-(d) or (f).  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |  |  |  |  |  |  |
| AM-ab-race(a)  |  |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail D   | ate  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   | · —  | Patent Application (PTO-152)   |  |  |  |  |
| Paper No(s)/Mail Date <u>12/5/01and 1/6/03</u> . 6)  Other:  |  |  |  |  |  |  |

Art Unit: 2614

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-7, 21 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ott (4,387,406).

Regarding claim 1, Ott discloses a technique for storing and transmitting digital data in a video format includes a use of color signals showing a chrominance signal generator 31 and a luminance signal generator 35 for transmitting lines of video data, which meet the transmitting step as claimed, D/A converters 29 and 33, and composite video generator 41 for modulating digital data onto the chrominance and luminance signals (col. 3, lines 40-68), which meet the modulating step as claimed.

Regarding claims 2-5, the clock 11 in Ott controls the data modulation rate in the encoder. By changing the clock rate, the modulated data rate generated by the D/A converters 29 and 33 can be controlled. For instance, when the clock speed is the same as the horizontal sync, the data is modulated at one bit per line or represented by color transition in between two lines, and when the clock speed is N times of the horizontal sync or higher than the horizontal sync, the data is modulated at more than one bits per line or represented by color transitions within the horizontal line. Therefore, Ott meets the bit rates as recited in claims 2-5 in view of the clock 11.

Art Unit: 2614

Regarding claim 6, see col. 3, lines 40-55.

Regarding claim 7, the composite video signal generator 41 formats the video signal into composite video signal in response to horizontal sync and vertical sync, which meets the claimed limitation.

Regarding claim 21, Ott shows a decoder in Figure 7.

Regarding claim 27, Ott is intended to transmit all kinds of information, including coupon.

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 8-20, 25, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ott (4,387,406).

Regarding claim 8, Ott teaches that data is transmitted during the active video period; however, he does not specify the preamble limitation as claimed. In any event, Ott teaches that the ROM library module 54 is being utilized to generate different patterns data pixels (col. 12, lines 6-12). Since conventional data packets inherently include headers or preambles, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to recognize that the ROM library module 54 could be modified to transmit data packets that have preambles.

Art Unit: 2614

Regarding claim 9, Ott further shows that different states of binary data are represented by color transition from red to blue and blue to red (col. 11, lines 65-68), except transmitted during the horizontal blanking period as claimed. It is well known in the art that extra information can be transmitted during the vertical and horizontal blanking interval in order to fully utilize the bandwidth of the television channel. Hence, it would have been obvious to one of ordinary skill in the at the time of the invention was made to transmit the modulated data of Ott in the horizontal blanking interval as well in order to fully utilize the bandwidth of the channel.

Regarding claim 10, in addition of rejection to claim 8, preambles or headers in a data packet is intended to identify what the packet is or differentiate it from others.

Regarding claim 11, as aforementioned, the data in Ott could be represented by color transitions in between lines and preamble data packets could be generated by the ROM library 54.

Regarding claim 12, the D/A converter 33 is for converting momentary digital signal into a luminance value signal Y which is applied to luminance signal generator 35 (col. 3, lines 65, to col. 4, line 4). The digital modulated luminance signal forms a black and white image when all three-color red, green, and blue signals have the same level. (Applicant's prior art admission also shows that digital encoding by using black and white gray levels is well known.) Since the digital data is represented by the black and white gray levels, the average value of the over all data is equal to the black and white gray levels. Therefore, the preamble as claimed is met by Ott.

Art Unit: 2614

Regarding claim 13, as aforementioned and in addition to rejection to claim 12, the ROM library module 54 is intended to generate different kinds of data pattern. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to generate the black and white pattern as claimed. It would have considered an obvious design choice. For example, as illustrated in Figure 10, Ott teaches that different data patterns can be generated by simply assigning different colors or gray levels to the scanning lines.

Regarding claims 14-16, similar to rejection to claim 13, the binary representations as claimed would have been considered an obvious design choice because the ROM library module 54 can be used to generated all kinds of representation patterns. The selection of the claimed patterns would have been considered an obvious design choice and would have been obvious to one of ordinary skill in the art.

Regarding claims 17 and 18, Ott does not specify the video editing full frames of said data comprising both odd and even lines of said data as claimed. In any event, the input data to buffer 17 in Ott could be any conventional video or audio data. If it is video, it must have both odd and even lines. It is well known in the art that video data needs to be edited before being broadcasted or recorded in order to have a desired presentation format. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to edit the data before provided to the buffer 17 if it is a video data to perform the well known functions as claimed.

Art Unit: 2614

Regarding claims 19 and 20, Ott does not specify the presenting and separating steps as claimed. It is well known that conventional standard television monitors present images in an even field and odd field-scanning format. Therefore, if the data decoded in Ott is a video data and the monitor is in interlaced type monitor, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to separate the data into even and odd fields and provide the data to the monitor to be presented in even field and odd field format.

Regarding claims 25 and 26, Ott does not specify the error detection bits and error correction bits, or the toggle bits as claimed. As mentioned above, the ROM library module 54 in Ott could be utilized to generated different kinds of data patterns. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to recognize that to use the ROM to generate error correction and detection bits or toggle bit would have been an obvious design choice because it is capable to generate all kinds of the data signals.

Regarding claim 28, Ott does not specify the step of transmitting an information key as claimed. It is well known in the art that when transmitting confidential information over a medium, it must be properly encrypted. This information can only be accessed by the party who has the proper key code. Since some data in Ott is needed to be transmitted securely, it must be properly encrypted. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ott so that the information could be transmitted, received, and decoded.

Application/Control Number: 09/939,580 Page 7

Art Unit: 2614

### Claim Rejections - 35 USC § 102

5. Claims 29-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Holman (5,285,278).

Regarding claim 29, Holman discloses a television electronic coupon system showing a step of integrating (see col. 5, lines 9-10, col. 8, lines 18-64, and col. 17, lines 8-18).

Regarding claim 30, see col. 5, lines 9-14.

Regarding claims 31 and 32, see col. 5, lines 51-55.

Regarding claim 33, see col. 17, lines 19-21.

Regarding claim 34, Figure 1 of Holman shows a plurality of interactive command buttons.

Regarding claims 35 and 36, see col. 3, lines 14-26, and col. 5, lines 8-33.

Regarding claim 37, see col. 56-68, or col. 14, lines 36-61.

## Allowable Subject Matter

6. Claims 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fields (6,281,820) shows a black and white data representation.

Art Unit: 2614

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number is **703-305-4743**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John Miller**, can be reached at **703-305-4795**.

# Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

### or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

M. Lee

Primary Examiner Art Unit 2614